

# PLT-SEC-T3-120-FM-UT - Type 3 surge protection device



2907918

<https://www.phoenixcontact.com/us/products/2907918>

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



Type 2/3 surge protection, consisting of protective plug and base element, with integrated status indicator and remote signaling for single-phase power supply networks. Nominal voltage: 120 V AC/DC

## Your advantages

- Surge protection family for universal use with optimum energy coordination from the lightning current arrester to the device protection
- Easy to maintain due to consistently pluggable protection modules
- Excellent level of information provided by mechanical/visual status indicator and remote indication contact
- Your preferred connection technology can be selected as both screw connection and Push-in connection are available
- Optimal additional protection of the industrial power supply for a longer service life and increased availability of the system
- 5-year warranty on your QUINT 4 power supply when installed together with PLT-SEC, see document in the download area

## Commercial data

|                                      |                    |
|--------------------------------------|--------------------|
| Item number                          | 2907918            |
| Packing unit                         | 5 pc               |
| Minimum order quantity               | 1 pc               |
| Sales key                            | CL19               |
| Product key                          | CL14A2             |
| Catalog page                         | Page 83 (C-4-2019) |
| GTIN                                 | 4055626257440      |
| Weight per piece (including packing) | 96.91 g            |
| Weight per piece (excluding packing) | 81.16 g            |
| Customs tariff number                | 85363030           |
| Country of origin                    | DE                 |

# PLT-SEC-T3-120-FM-UT - Type 3 surge protection device



2907918

<https://www.phoenixcontact.com/us/products/2907918>

## Technical data

### Product properties

|                                |                                         |
|--------------------------------|-----------------------------------------|
| Product type                   | Device protection                       |
| Product family                 | SEC Family                              |
| IEC power supply system        | TN-S                                    |
|                                | TT                                      |
| Type                           | DIN rail module, two-section, divisible |
| Number of positions            | 2                                       |
| Surge protection fault message | Optical, remote indicator contact       |

### Insulation characteristics

|                         |          |
|-------------------------|----------|
| Overvoltage category    | III      |
| Pollution degree        | 2        |
| IEC test classification | II / III |
|                         | T2 / T3  |
| EN type                 | T2 / T3  |
| Number of ports         | One      |

### Electrical properties

#### Indicator/remote signaling

|                    |                                |
|--------------------|--------------------------------|
| Connection name    | Remote fault indicator contact |
| Switching function | Changeover contact             |
| Operating voltage  | 250 V AC                       |
|                    | 125 V DC (200 mA DC)           |
| Operating current  | 0.5 A AC                       |
|                    | 0.5 A DC (75 V DC)             |

### Connection data

|                                  |                                             |
|----------------------------------|---------------------------------------------|
| Connection method                | Screw connection                            |
| Screw thread                     | M3                                          |
| Tightening torque                | 0.5 Nm                                      |
| Conductor cross section flexible | 0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup> |
| Conductor cross section rigid    | 0.2 mm <sup>2</sup> ... 4 mm <sup>2</sup>   |
| Conductor cross section AWG      | 24 ... 12                                   |

### Dimensions

|                     |         |
|---------------------|---------|
| Dimensional drawing |         |
| Width               | 17.7 mm |

# PLT-SEC-T3-120-FM-UT - Type 3 surge protection device



2907918

<https://www.phoenixcontact.com/us/products/2907918>

|                  |                                 |
|------------------|---------------------------------|
| Height           | 93.4 mm                         |
| Depth            | 74.5 mm (incl. DIN rail 7.5 mm) |
| Horizontal pitch | 1 Div.                          |

## Material specifications

|                                        |                       |
|----------------------------------------|-----------------------|
| Color (Male connector)                 | light gray (RAL 7035) |
| Color (Base element)                   | gray (RAL 7042)       |
| Flammability rating according to UL 94 | V-0                   |
| CTI value of material                  | 600                   |
| Insulating material                    | PA 6.6-FR 20 % GF     |
|                                        | PA 6.6-FR             |
| Housing material                       | PA 6.6-FR 20 % GF     |
|                                        | PA 6.6-FR             |

## Protective circuit

|                                                    |                                         |
|----------------------------------------------------|-----------------------------------------|
| Mode of protection                                 | L-N                                     |
|                                                    | L-PE                                    |
|                                                    | N-PE                                    |
| Direction of action                                | 1L-N & N-PE                             |
| Nominal voltage $U_N$                              | 120 V AC (TN-S)                         |
|                                                    | 120 V AC (TT)                           |
| Nominal frequency $f_N$                            | 50 Hz (60 Hz)                           |
| Maximum continuous voltage $U_C$                   | 150 V AC                                |
| Rated load current $I_L$                           | 26 A (at 30 °C)                         |
| Residual current $I_{PE}$                          | $\leq 5 \mu A$                          |
| Standby power consumption $P_C$                    | $\leq 10.6 \text{ mVA}$ (at $U_{REF}$ ) |
|                                                    | $\leq 13.5 \text{ mVA}$ (at $U_C$ )     |
| Reference test voltage $U_{REF}$                   | 132 V AC                                |
| Nominal discharge current $I_n$ (8/20) $\mu s$     | 5 kA                                    |
| Maximum discharge current $I_{max}$ (8/20) $\mu s$ | 10 kA                                   |
| Combination wave $U_{OC}$                          | 6 kV                                    |
| Voltage protection level $U_p$ (L-N)               | $\leq 0.75 \text{ kV}$ (at $U_{OC}$ )   |
|                                                    | $\leq 0.95 \text{ kV}$ (at $I_n$ )      |
| Voltage protection level $U_p$ (L-PE)              | $\leq 0.85 \text{ kV}$                  |
| Voltage protection level $U_p$ (N-PE)              | $\leq 0.85 \text{ kV}$                  |
| TOV behavior at $U_T$ (L-N)                        | 240 V AC (5 s / withstand mode)         |
|                                                    | 240 V AC (120 min / withstand mode)     |
| TOV behavior at $U_T$ (L-PE)                       | 240 V AC (5 s / withstand mode)         |
|                                                    | 240 V AC (120 min / withstand mode)     |
|                                                    | 1332 V AC (200 ms / safe failure mode)  |
| TOV behavior at $U_T$ (N-PE)                       | 1200 V AC (200 ms / safe failure mode)  |
| Response time $t_A$ (L-N)                          | $\leq 25 \text{ ns}$                    |
| Response time $t_A$ (L-PE)                         | $\leq 100 \text{ ns}$                   |
| Response time $t_A$ (N-PE)                         | $\leq 100 \text{ ns}$                   |

# PLT-SEC-T3-120-FM-UT - Type 3 surge protection device



2907918

<https://www.phoenixcontact.com/us/products/2907918>

|                                         |                   |
|-----------------------------------------|-------------------|
| Short-circuit current rating $I_{SCCR}$ | 10 kA AC          |
| Max. backup fuse with branch wiring     | 32 A (gG / B / C) |

## Additional technical data

|                                                                 |                                                                     |
|-----------------------------------------------------------------|---------------------------------------------------------------------|
| Short-circuit current rating $I_{SCCR}$                         | 0.25 kA DC (Without additional backup fuse in the DC branch wiring) |
|                                                                 | 5 kA DC (for 20 A gG / B backup fuse)                               |
| Residual voltage $U_{res}$ (L-N)                                | $\leq 0.68$ kV (at 2 kA)                                            |
|                                                                 | $\leq 0.75$ kV (at 3 kA)                                            |
|                                                                 | $\leq 0.64$ kV (at $U_{OC} = 4$ kV)                                 |
| Residual voltage $U_{res}$ (L-PE)                               | $\leq 0.58$ kV (at 2 kA)                                            |
|                                                                 | $\leq 0.65$ kV (at 3 kA)                                            |
|                                                                 | $\leq 0.75$ kV (at $U_{OC} = 4$ kV)                                 |
| Residual voltage $U_{res}$ (N-PE)                               | $\leq 0.58$ kV (at 2 kA)                                            |
|                                                                 | $\leq 0.65$ kV (at 3 kA)                                            |
|                                                                 | $\leq 0.75$ kV (at $U_{OC} = 4$ kV)                                 |
| Maximum continuous voltage $U_C$                                | 150 V DC                                                            |
| Mode of protection                                              | (DC+) - (DC-)                                                       |
|                                                                 | (DC+/DC-) - PE                                                      |
| IEC test classification (in accordance with IEC 61643-21)       | D1                                                                  |
| Impulse durability (wire-wire)                                  | D1 - 500 A                                                          |
| Impulse durability (line-earth)                                 | D1 - 500 A                                                          |
| Pulse discharge current $I_{imp}$ (10/350) $\mu$ s (line-line)  | 0.5 kA                                                              |
| Pulse discharge current $I_{imp}$ (10/350) $\mu$ s (line-earth) | 0.5 kA                                                              |

## Environmental and real-life conditions

### Ambient conditions

|                                         |                                                               |
|-----------------------------------------|---------------------------------------------------------------|
| Degree of protection                    | IP20                                                          |
| Ambient temperature (operation)         | -40 °C ... 80 °C                                              |
| Ambient temperature (storage/transport) | -40 °C ... 80 °C                                              |
| Altitude                                | $\leq 2000$ m (operating voltage remote contact $\leq 250$ V) |
|                                         | $\leq 6000$ m (operating voltage remote contact $\leq 150$ V) |
| Permissible humidity (operation)        | 5 % ... 95 %                                                  |
| Shock (operation)                       | 30g (Half-sine / 11 ms / 3x $\pm$ X, $\pm$ Y, $\pm$ Z)        |
| Vibration (operation)                   | 5g (5 ... 500 Hz / 2.5 h / X, Y, Z)                           |

## Approvals

### UL specifications

|                                           |          |
|-------------------------------------------|----------|
| Maximum continuous operating voltage MCOV | 150 V AC |
|                                           | 150 V DC |
| Short-circuit current rating (SCCR)       | 10 kA AC |
|                                           | 5 kA DC  |
| Voltage protection rating VPR (L-N)       | 700 V    |
| Voltage protection rating VPR (L-G)       | 700 V    |

# PLT-SEC-T3-120-FM-UT - Type 3 surge protection device



2907918

<https://www.phoenixcontact.com/us/products/2907918>

|                                             |                   |
|---------------------------------------------|-------------------|
| Voltage protection rating VPR (N-G)         | 900 V             |
| Voltage protection rating VPR (DC+) - (DC-) | 700 V             |
| Voltage protection rating VPR (DC+) - G     | 900 V             |
| Voltage protection rating VPR (DC-) - G     | 900 V             |
| Nominal discharge current $I_n$             | 5 kA              |
| Mode of protection                          | L-N               |
|                                             | L-G               |
|                                             | N-G               |
|                                             | (DC+) - (DC-)     |
|                                             | (DC+) - G         |
|                                             | (DC-) - G         |
| Nominal voltage                             | 150 V DC          |
| Rated load current $I_L$                    | 20 A              |
| Power distribution system                   | Single phase      |
|                                             | DC                |
| Nominal frequency                           | 50/60 Hz          |
| SPD Type                                    | 2 (Open-Type SPD) |

## UL indicator/remote signaling

|                      |                  |
|----------------------|------------------|
| Operating voltage    | 250 V AC (0.5 A) |
| DC operating voltage | 12 V DC (4 A)    |
|                      | 24 V DC (2 A)    |
|                      | 48 V DC (1 A)    |

## UL connection data

|                             |                          |
|-----------------------------|--------------------------|
| Tightening torque           | 4.4 lb <sub>f</sub> -in. |
| Conductor cross section AWG | 16 ... 12                |

## Standards and regulations

|                          |              |
|--------------------------|--------------|
| Standards/specifications | IEC 61643-11 |
| Note                     | 2011         |

## EN 61643-11

|                          |             |
|--------------------------|-------------|
| Standards/specifications | EN 61643-11 |
| Note                     | 2012        |

## Mounting

|               |                 |
|---------------|-----------------|
| Mounting type | DIN rail: 35 mm |
|---------------|-----------------|

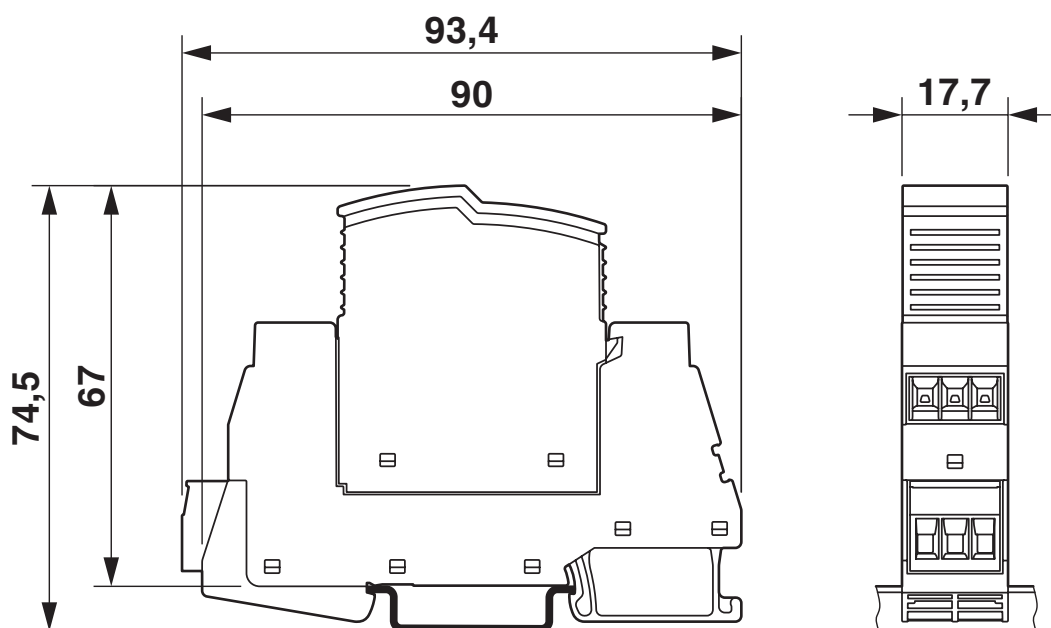
# PLT-SEC-T3-120-FM-UT - Type 3 surge protection device

2907918

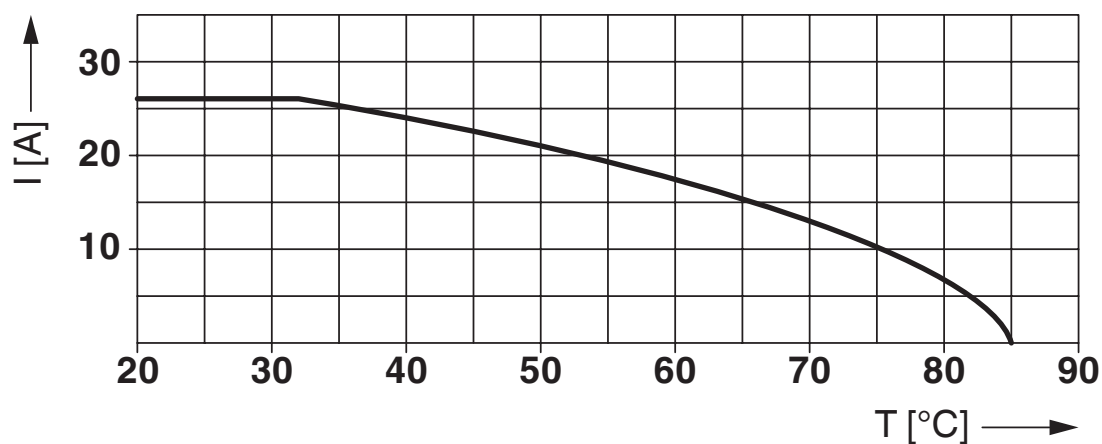
<https://www.phoenixcontact.com/us/products/2907918>

## Drawings

Dimensional drawing



Diagram



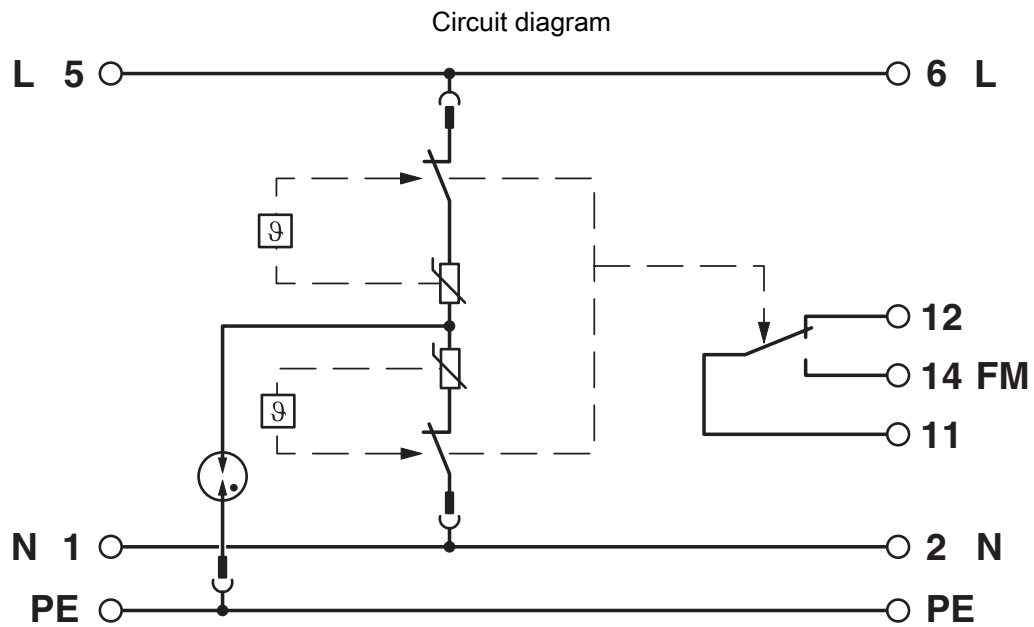
Nominal current depending on ambient temperature

# PLT-SEC-T3-120-FM-UT - Type 3 surge protection device



2907918

<https://www.phoenixcontact.com/us/products/2907918>



# PLT-SEC-T3-120-FM-UT - Type 3 surge protection device



2907918

<https://www.phoenixcontact.com/us/products/2907918>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2907918>



**IECEE CB Scheme**

Approval ID: NL-51083



**EAC**

Approval ID: RU C-DE.\*09.B.00169

**CCA**

Approval ID: NTR-NL 7676



**KEMA-KEUR**

Approval ID: 71-103027



**UL Listed**

Approval ID: FILE E 330181



**CSA**

Approval ID: 13631



**cUL Listed**

Approval ID: FILE E 330181

**UAE-RoHS**

Approval ID: 23-10-88891

**DNV**

Approval ID: TAE00002U7



**cUL Recognized**

Approval ID: FILE E 340736



**UL Recognized**

Approval ID: FILE E 340736



# PLT-SEC-T3-120-FM-UT - Type 3 surge protection device



2907918  
<https://www.phoenixcontact.com/us/products/2907918>

## Classifications

### ECLASS

|             |          |
|-------------|----------|
| ECLASS-13.0 | 27171203 |
|-------------|----------|

### ETIM

|          |          |
|----------|----------|
| ETIM 9.0 | EC000942 |
|----------|----------|

### UNSPSC

|             |          |
|-------------|----------|
| UNSPSC 21.0 | 39121600 |
|-------------|----------|

# PLT-SEC-T3-120-FM-UT - Type 3 surge protection device



2907918  
<https://www.phoenixcontact.com/us/products/2907918>

## Environmental product compliance

|                                         |                                          |
|-----------------------------------------|------------------------------------------|
| EU RoHS                                 |                                          |
| Fulfills EU RoHS substance requirements | Yes, No exemptions                       |
| China RoHS                              |                                          |
| Environment friendly use period (EFUP)  | EFUP-E                                   |
|                                         | No hazardous substances above the limits |
| EU REACH SVHC                           |                                          |
| REACH candidate substance (CAS No.)     | No substance above 0.1 wt%               |

Phoenix Contact 2025 © - all rights reserved  
<https://www.phoenixcontact.com>

Phoenix Contact USA  
586 Fulling Mill Road  
Middletown, PA 17057, United States  
(+717) 944-1300  
[info@phoenixcon.com](mailto:info@phoenixcon.com)